

**Listing of Claim Amendments:**

1. (Currently amended) A process for extracting BMP from DBM, comprising the steps of:  
providing DBM;  
mixing a first portion of said DBM with ~~a cold~~ an aqueous solution of a neutral salt and a solubilizing agent for BMP to thereby obtain a liquid fraction; and  
extracting assaying BMP from the resulting ~~precipitate and liquid fraction~~ with an ELISA kit to determine osteoinductivity without dialyzing ~~either of said resulting precipitate and said liquid fraction.~~
2. (Currently amended) The process of claim 1, further comprising the steps of:  
~~taking a first portion of said extracted BMP and determining its osteoinductivity using an ELISA kit; and~~  
taking a second portion of said ~~extracted BMP~~ DBM and determining its osteoinductivity by implantation in an ~~ATNR~~ athymic nude rat;  
the osteoinductivities of said first and second portions being substantially the same.
3. (Currently amended) The process of claim 1, ~~further comprising the step of preparing said extracted BMP for implantation without the additional step of dialysis wherein the~~ solubilizing agent is collagenase.
4. (Currently amended) A process for extracting BMP from DBM, including the step of retaining molecules having a molecular weight of ~~at least~~ less than 10kDa.
5. (New) A process for determining osteoinductivity of DBM via in vitro assay of BMP comprising:  
providing DBM;

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solubilizing BMP from the DBM to thereby obtain an unfiltered BMP containing solution; and

assaying the unfiltered BMP containing solution to determine a level of a selected BMP in the unfiltered BMP containing solution.

6. (New) The process of claim 5, further comprising comparing the level of the selected BMP to data correlating BMP level with osteoinductivity to thereby predict osteoinductivity of the DBM.
7. (New) The process of claim 5, wherein the assay of the selected BMP is conducted with an ELISA kit.
8. (New) The process of claim 5, wherein molecules having a molecular weight of less than 10kDa are retained in the BMP containing solution during the assay for BMP.
9. (New) The process of claim 5, wherein the selected BMP is BMP-2.
10. (New) The process of claim 5, wherein the level of the BMP-2 in the BMP containing solution is greater than about 1400 pg/g DBM.
11. (New) The process of claim 5, further comprising:  
implanting a portion of the DBM into at least one rat to determine a level of new bone growth induced by the DBM in the at least one rat, and correlating the level of new both growth in the at least one rat with the level of the selected BMP in the unfiltered DBM containing solution to thereby obtain data correlating BMP level of the DBM with osteoinductivity of the DBM.

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